

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

FP04-0360-00

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/015440

International filing date (day/month/year)

19.10.2004

Priority date (day/month/year)

14.11.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant

HAMAMATSU PHOTONICS K.K.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-16	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: WO 2000/43751 A1 (Laboratory of Molecular Biophotonics), 27 July 2000</p> <p>Document 2: JP 2002-71566 A (Hitachi Ltd.), 08 March 2002</p> <p>Document 3: JP 2003-52624 A (Richard Wolf GmbH) 25 February 2003</p> <p>The novelty of inventions of claims 1-8, 10-16 is refuted by documents 1, 2 cited in the ISR. Document 1 describes a pipette adapter comprising a reflective mirror inside thereof. Document 1 describes only the application to light absorption analysis, but a simple sample accommodating cell obviously can be employed for a variety of optical analysis. The pipette adapter described in document 1 and the pipette adapter of the invention of the present application are absolutely identical in terms of structure, and as described in Par. No. 0045 of the present specification, this pipette adapter can be employed not only for fluorescent analysis, but also for light absorption analysis.</p> <p>Furthermore, disposing an excitation light filter as a spectral filter in fluorescent analysis and disposing a filter for fluorescent spectroscopy on an excitation light axis or in a position far from the excitation light axis are the conventional technical matters, as described in document 2, and disposing a necessary optical element such as a collimator lens on the respective optical path can be appropriately achieved by a person skilled in the art.</p> <p>The novelty of invention of claim 9 is refuted by documents 1-3 cited in the SIR. Document 3 describes switching a spectral element suitable for picking up images by inserting onto an optical path and removing therefore when switching an optical device between applications for white light imaging and florescent imaging and analysis (see Par. Nos. 0001, 0048, 0052, 0055-0058, 0065, 0069). Thus, enabling the insertion and removal of an optical element necessary for each analysis when employing a single device for various analyses can be said to be conventionally practiced.</p>			

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

A constitution of causing the second optical filter (filter for fluorescent spectroscopy) provided on an excitation optical axis to be in a stand-by mode in a position far from the excitation optical axis, as described in claim 9, is not clearly explained in the specification (the stand-by feature is explained only with respect to the third optical filter), and this feature is not sufficiently supported by the specification.